

# When to convert woods and forests to open habitat in England: Government policy

March 2010

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## Foreword

This policy is a creative and flexible response to a changing environment, and it opens up the possibility of sustaining more diverse, resilient and dynamic landscapes, landscapes that are important for people as well as for wildlife.

Open habitats – unimproved grasslands, heaths and moors, marshlands, fens and bogs – these are habitats we value for a whole variety of reasons, a heritage we recognise in the England Biodiversity Strategy. Increasingly these assets have been lost to us all. This new policy provides a rationale and framework, fit for the 21<sup>st</sup> century, for recovering some of this loss in England by converting selected woodlands into open habitats.

Thinking to the future, global change sharpens our minds and focuses the policy. Increasing open habitats so that we have more diverse landscapes should make species better able to accommodate flexibly to a shifting climate. However, Government commitments to a low carbon economy mean that we need compelling reasons for increasing the extent of open habitat when the value of productive woodland for carbon sequestration is clear. For converting woodlands here, undertaking compensatory plantings there, this policy should make us better able to have the right habitats and the right trees in the right places.

The policy aims to make a significant difference. But it recognises that scale and targeting are crucial. For maximum benefit, it looks to convert woods on less productive soils where we know that growing high quality timber is challenging but where the diversity of many open habitats thrives. It takes a site-by-site approach but also aims for the added value that can come from extending, buffering and connecting high quality habitats. By promoting thoughtful management it will ensure a lasting contribution to those Habitat Action Plan targets that are already common cause among Government departments and agencies, non-governmental organisations and local authorities.

Collaboration will be essential for success and the policy is already the result of a transparent process of consultation with such key stakeholders as these, with the timber industry and among community groups and individuals. Just as significant for many of us, delivering the policy is seen as a means of engaging local participation in changing the landscape in acceptable ways. Woods are cherished by many as an integral part of our familiar scenery and the removal of trees often resented. Here we have an opportunity to ensure that future changes are better understood and welcomed at a local level. People will be thus encouraged to voice the cultural and recreational values we vest in particular places and speak up for the wildlife and landscape we ourselves prize there.

This policy recognises that managing habitats is often about managing change. The prospect of more dynamic landscapes with open habitats among woods, of rich edge habitats and shifting mosaics managed in the right way at the right pace, this is a timely vision for the 21<sup>st</sup> century.

Professor John Rodwell

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# 1 Summary

This is Government policy on how to decide when to convert woodland to open habitat in England. We, the Forestry Commission, developed this policy working with Defra, Natural England and others. Our ambition is to generate landscapes that provide benefits for people and wildlife for the 21<sup>st</sup> Century. We will achieve this through land-use change using conversion of woodland to open habitat in tandem with woodland creation.

The aims of this policy are to:

- generate biodiverse landscapes of open habitat and woodland that provide long-term benefits to people and wildlife;
- make sure that conversion of woodland results in more open habitat which makes a significant contribution to biodiversity objectives; and
- minimise any negative impacts on the ability of woodland and forestry to increasingly contribute towards a low-carbon economy.

The outcomes we want from the policy are:

- resilient ecological communities, where wildlife, including open habitat species, is able to cope with changes so that biodiversity is maintained and enhanced;
- woodland and forestry that make an increased contribution to reducing greenhouse gas emissions, through higher rates of woodland expansion and by maintaining the area of commercially productive woodland;
- land management which is financially viable in the long-term so that resilient biodiverse landscapes can be maintained and the call on public funding is within manageable limits; and
- people's engagement with the landscape they use, particularly their local landscape, is maintained or enhanced.

To make progress on all these aspects we will apply the following principles:

- **the right tree in the right place;**
- **the right habitat in the right place; and**
- **the right change at the right pace.**

We will deliver this policy using the following elements.

- **A framework** for site-by-site decision-making based on converting woodland to open habitat where it will consolidate current high quality habitat, or where it will significantly enhance key species and habitats.
- **A mechanism** for balancing woodland removal and woodland creation based on making reasonable progress on both enhancing open habitats to benefit wildlife and creating woodland to help reduce greenhouse gases.
  - We estimate that the level of ambition for land-use change that represents reasonable progress on both, is a rate of conversion of woodland to open habitat of about 1,000 ha per year, if the rate of

woodland expansion also accelerates. An increase in the rate of conversion of woodland to open habitat will therefore start slowly and progress towards 1,000 ha per year with an accelerating rate of woodland expansion.

- The mechanism will include compensatory planting in certain circumstances, and maintaining the total area of commercially productive woodland, such as conifers.
- **A process** for ensuring local involvement in decision-making from the early stages of any proposals for conversion of woodland to open habitat.
- **Standards** for conversion and for managing habitats created or woodland retained to:
  - minimise negative impacts on aspects such as landscape, access, and soils;
  - minimise greenhouse gas emissions during conversion;
  - make sure woodland is managed so it can still be converted at a later date if needed; and
  - provide information on where to create permanent open habitat, and where more dynamic mosaics of woodland and open habitat are desirable.
- **Evaluation** of progress towards the outcomes we want. We will do this with our stakeholders. We will assess progress using indicators of outcomes such as the amount of open habitat restored, or expanded, and changes in the area of productive woodland.

In collaboration with Natural England and working with others, we will evolve the delivery mechanisms available to Government to implement the policy. Key delivery mechanisms are:

- regulation;
- grants; and
- publicly owned land.

We will publish a strategy for open habitats on the Forestry Commission public forest estate.

We will review this policy in 2015.

## 2 What is this about?

In this document, we, Forestry Commission England, set out Government policy on how to decide when to permanently convert woods and forests to open habitat.

To develop this policy, we have followed an open and transparent process (see Section 8.1). We have involved key stakeholders and published the intermediate steps at [www.forestry.gov.uk/england-openhabitats](http://www.forestry.gov.uk/england-openhabitats).

## 3 What this policy covers

This policy covers projects that fulfil all the following characteristics.

- Any proposal to permanently remove woods<sup>1</sup> to restore or expand priority open habitats as defined in the England Biodiversity Strategy.<sup>2</sup> It does not apply to small-scale woodland removal as part of 'restructuring', such as creating glades, rides, and open areas by watercourses. The open habitats this covers are primarily lowland meadows, upland hay meadows, lowland chalk grassland, lowland dry-acid grassland, purple moor-grass and rush pasture, upland heathland, blanket bog (moor), limestone pavement, lowland raised bogs, fens, reedbeds and lowland heathland.
- Where the proposed woodland removal is permanent. So it does not cover any area that will be replanted or allowed to naturally regenerate to woodland.
- Where a felling licence<sup>3</sup> or environmental impact assessment<sup>4</sup> for woodland removal is required **and** where the scale and permanency of conversion is judged to represent land-use change from woodland to non-woodland.

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<sup>1</sup> From now on we use 'woodland' or 'woods' instead of 'woods and forests'. We use 'forest' to describe land predominately covered in trees, whether in large tracts, known as forests, or smaller areas known as woods, copses, spinneys, or shelter-belts. 'woodland' is clearer for many, but for this policy it means the same as 'forest'. Forestry is the practice of planting and managing forests.

<sup>2</sup> <http://www.defra.gov.uk/environment/biodiversity/uk/e-biostrat.htm>.

<sup>3</sup> <http://www.forestry.gov.uk/forestry/infd-6dfk86>.

<sup>4</sup> <http://www.forestry.gov.uk/forestry/infd-6dfkbc>.



## 4 Aims, objectives, and outcomes

### 4.1 What we are trying to achieve

This policy aims to:

- generate biodiverse landscapes of woodland and open habitat that evolve to provide benefits to people and wildlife in the long-term;
- make sure that converting woodland to open habitat results in more open habitat which makes a significant contribution to biodiversity objectives; and
- minimise negative impacts on the ability of woodland and forestry to increasingly contribute towards a low-carbon economy.

### 4.2 How we will achieve our objectives

We will achieve our objectives by:

- targeting conversion of woodland to open habitat where it will have most benefit for wildlife;
- balancing the rate and extent of woodland removal with the rate and extent of woodland creation so that:
  - the total area of woodland in England does not go down;
  - the plans for woodland expansion to help the move to a low-carbon economy can be fulfilled, including making sure that the total area of woodland in England that can produce commercially viable volumes of timber<sup>5</sup> is maintained; and
- open habitats can be maintained at reasonable cost to the Government;
- involving local people in the decisions on converting woodland to open habitat;
- promoting the right woodland management on potential open habitat sites, so that it can be converted to open habitat at a later date if needed; and
- promoting the right management of open habitat restored or expanded from woodland so it can provide benefits to wildlife and people in the long-term, including in some cases shifting mixtures of woodland and open habitat.

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<sup>5</sup> We call this 'productive woodland' from now on.

## 4.3 Why this approach is necessary

We need a policy that generates a landscape that provides benefits for people and wildlife both now and in the future. However, our approach is necessary due to changes in land-use that happened in the past.

During the 20<sup>th</sup> century large areas of open habitat, such as heathland, moorland, wetland, bog and unimproved grassland were planted with trees for timber production. On others, trees such as birch colonised due to natural regeneration. These types of open habitat are now recognised as valuable for their landscape, cultural heritage and, particularly, their wildlife with species such as Dorset heath, marsh butterwort, sand lizard, woodlark, black grouse, and silver studded blue butterfly. Planting trees tends not to change the soil as much as other land-uses. Therefore, it would be feasible to convert many of the woods created on open habitat in the 20<sup>th</sup> century into open habitat again.

Halting and then reversing declines in biodiversity is one of the Government's objectives. Converting some types of woodland to open habitat can be good for several key species and contributes to Habitat Action Plan targets, part of the England Biodiversity Strategy (see Section 8.2).

However, woods also have an important role in many Government agendas. These are set out in the Government's *Strategy for England's Trees Woods and Forests* (see Section 8.2). In the United Kingdom (UK) forest land will not be converted to other land uses, unless there are compelling reasons in the public interest for doing so.<sup>6</sup> Converting woodland to open habitat generally does not help achieve objectives for reducing greenhouse gas emissions. This is because open habitat stores less carbon than woodland and does not grow timber to substitute for energy intensive materials such as concrete and steel. It also generally increases the cost of land management because maintaining open habitats usually costs more than managing woodland. In addition, many people object to outside agencies rapidly changing their local landscape, such as by removing woodland, without them having a say<sup>7</sup>.

How we decide whether to convert woodland to open habitats therefore can affect objectives for wildlife, for moving to a low-carbon economy and for involving local communities.

To make progress on all these aspects we will apply the following principles:

- **the right tree in the right place;**
- **the right habitat in the right place; and**
- **the right change at the right pace.**

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<sup>6</sup> This requirement arises from the UK Government's international obligations for forestry and is set out in the UK Forestry Standard, the Government's approach to sustainable forest management in the UK.

<sup>7</sup> For a review of the evidence see Section 8.3.

## 4.4 Outcomes

These are the outcomes<sup>8</sup> we want from this policy

**Resilient, biodiverse ecological communities.** Resilient ecological communities where wildlife, including open habitat species, is able to cope with changes so that biodiversity is maintained and enhanced. There are several potentially threatening changes such as development, pollution, neglect or other unsuitable management, and non-native invasive species, but the main long-term threat is climate change. One of the indicators of this outcome is change in the area of open habitat.

**Moving to a low-carbon economy.** Woodland and forestry make an increased contribution to the UK Government's commitments for reducing greenhouse gas emissions, by increasing the rate of woodland expansion and maintaining the area of commercially productive woodland.

**Financial viability.** Land management is financially viable in the long-term. This means that the resilient, biodiverse landscapes can be maintained without periodic injections of funding for remedial works. Also, any long-term call on public funding, such as agri-environment grants and the cost of running the Forestry Commission public forest estate, is kept within manageable limits.

**Positive engagement by local and other users.** People's positive involvement in the landscape they use, particularly their local landscape, is maintained or enhanced.

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<sup>8</sup> Changes in the real world.

## 5 Delivering this policy

We will deliver this policy using the following.

- A framework for deciding what kinds of sites the Government should 'support', 'allow' or 'not allow' for converting woodland to open habitat.
- A mechanism for managing the rate and overall extent of woodland removal for open habitat in comparison to the rate and overall extent of woodland creation. This will include making sure that the total area of commercially productive woodland does not go down.
- Standards to make sure that converting and managing new open habitat or retained woodland are done according to best practice. This will include shifting mixtures of woodland and open habitat in some cases.
- A process for making sure there is high quality local engagement in decision making about open habitat proposals.
- Careful, open, and transparent monitoring and evaluation of the policy.

We present each of these in more detail below. First, we summarise the mechanisms which Government will use to deliver this policy.

### 5.1 Delivery mechanisms

The Government has three main delivery mechanisms for this policy: regulation, grants, and publicly owned land. The key delivery organisations are the Forestry Commission and Natural England.<sup>9</sup>

#### 5.1.1 Regulation

With some exceptions, permission through a felling licence from the Forestry Commission is usually required to fell growing trees. Creating new woodland or permanently removing woodland above certain thresholds may require an Environmental Statement and Forestry Commission consent under Environmental Impact Assessment regulations.

#### 5.1.2 Grants and other incentives

Grants and other incentives can be used to encourage woodland creation and for maintaining open habitats. The Forestry Commission's English Woodland Grant Scheme<sup>10</sup> provides grant aid for woodland creation. Higher Level Stewardship<sup>11</sup> funding from Natural England provides specific support for managing open habitat, and for removing woodland in certain circumstances. The English

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<sup>9</sup> <http://www.naturalengland.org.uk>.

<sup>10</sup> <http://www.forestry.gov.uk/website/forestry.nsf/byunique/infid-74adad>.

<sup>11</sup> <http://www.naturalengland.org.uk/ourwork/farming/funding/es/hls/default.aspx>.

Woodland Grant Scheme also provides support for other relevant activities such as woodland improvement, woodland planning, and involving local communities. There may be other stewardship grants from Natural England for relevant activities. Funding from other non-public sources may also be available for conversion and subsequent management and other types of incentive may become relevant, e.g.: biodiversity offset schemes.

### 5.1.3 Publicly owned land

The Forestry Commission public forest estate in England covers 258,000 hectares (ha) at 1,500 sites across England. The public forest estate includes 36,045 ha of open habitat.<sup>12</sup>

Decisions about individual sites on the public forest estate are made using forest design plans. Forest design plans are prepared for all individual woodlands or groups of woodlands. They show how each woodland or block of land will be treated to deliver priorities with detailed plans over ten years within an overall time-frame of 50 to 100 years. The process includes wide consultation, often involving public meetings.

Current forest design plans identify 12,415 ha of woodland for conversion to open habitat. Of the remaining woodland, 54,647 ha could be ecologically suitable for conversion to open habitat, although much of this has significant constraints, such as leasehold status, social acceptability of woodland removal, loss of highly productive woodland, and the cost of maintenance. We will carry out further work to assess this potential as part of implementing this policy.

The Ministry of Defence also manages a significant amount of woodland and open habitat. It uses 'integrated rural management plans' to balance the primary objective, military training, with nature conservation, historic environment, public access and other issues. In recent years, the Ministry of Defence has undertaken a programme to maintain and improve sites of special scientific condition in target condition. This has included a lot of work to remove plantations and invading scrub to restore and improve the condition of open habitat where compatible with military training. The Ministry of Defence considers all opportunities to restore habitats where this is compatible with the military training objectives of the site. However, compensatory planting may be required in cases where woodland removal on the estate could compromise military training

Other organisations such as local authorities also manage areas of woodland and open habitat that may have potential under this policy.

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<sup>12</sup> See Spencer, JW and Edward, R (2009) Open habitats and open habitat potential on the Forestry Commission Public Forest Estate in England, [http://www.forestry.gov.uk/pdf/eng-open-habitats-evidence-survey.pdf/\\$FILE/eng-open-habitats-evidence-survey.pdf](http://www.forestry.gov.uk/pdf/eng-open-habitats-evidence-survey.pdf/$FILE/eng-open-habitats-evidence-survey.pdf).

### 5.1.4 'Support', 'allow', 'not allow'

In this document, we use three terms to describe our approach to converting woodland to priority open habitats:

- **Support** – means that we will grant permission (with or without conditions and subject to environmental impact assessment), that funding may be available, that we may provide materials such as guidance on good practice; and that we may carry out that activity on the public forest estate.
- **Allow** – means that we will grant permission, but conditions may be attached, public funding is unlikely, and the activity may not be carried out on the public forest estate.
- **Not allow** – means that we will not grant permission where regulatory powers are relevant.

Because sites vary it is not possible to provide rigid definitions of the situations where these three approaches apply. For example, sites where we may support conversion are also sites where we will normally allow conversion.

In the next section, we explain how we will implement the framework for decision making, mechanism for managing the overall rate of conversion and other elements of the policy.

## 5.2 Framework for decision making

When making decisions on felling licences and through environmental impact assessment, we must use a site-by-site approach using an objective assessment of the evidence each time. This site-by-site approach will take into account a wide range of issues that may be influenced by woodland removal such as access, landscape, water management, and the historic environment. The framework below is derived from an analysis of the evidence on a wide range of issues at a national scale (see Section 8.3). This shows that at a national scale the most relevant issues for the overall decision about whether conversion itself is appropriate, are the impacts on biodiversity, greenhouse gas emissions, and local involvement. Other issues are important, but the evidence shows that they can generally be handled by following good practice. The framework therefore indicates the kinds of sites where we are likely to allow or support conversion of woodland to open habitat. It does not replace the need for site-by-site assessment and to test proposals against good practice.

We will also use this framework when undertaking forest design planning on the public forest estate. Natural England will take it into account when deciding where it will support woodland removal and subsequent open habitat management, e.g.: when targeting higher level stewardship grants.

It is the responsibility of those proposing converting woodland to open habitat, to demonstrate how the proposed project fits with this framework and provide us with the necessary evidence. We encourage other public sector landowners, such as local authorities to use this framework.

## 5.2.1 Sites we may support

Sites where we may support and will normally allow the conversion of woodland to open habitat.

- **Extending or buffering high quality habitat.** When the new open habitat will extend or buffer areas of high quality existing open habitat, and there is evidence that fragmentation of the current habitat is having a detrimental impact on the wildlife in that habitat.
- **Connecting high quality habitat.** When the new open habitat will form a viable wildlife link between areas of high quality open habitat (improving 'connectivity') and there is evidence that lack of connectivity is having a significant detrimental impact on the wildlife in that habitat.
- **Designated areas.** When the woodland is growing on a site with a national or international conservation designation, such as a site designated under the Habitats Directive for Annex 1 habitat types, as a Site of Special Scientific Interest or National Nature Reserve and the woodland adversely impacts on its open habitat characteristics.
- **Grazing.** When the new open habitat will extend or link areas of open habitat to allow a practical grazing area to form, and there is evidence that conservation grazing will be established and maintained once the open habitat is created.
- **Threshold sizes.** When the new open habitat will add to the current area of open habitat to form a patch of continuous or well-connected open habitat that is significantly more viable in the long-term. Minimum desirable patch sizes identified in Habitat Actions Plans can be used as a guide (Section 8.4).
- **Opportunities for species of conservation concern.** When there is evidence that converting the woodland to open habitat presents significant opportunities to enhance species of conservation concern<sup>13</sup>.

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<sup>13</sup> Under section 41 of the Natural Environment and Rural Communities Act, the Secretary of State must, for England, publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. See <http://www.defra.gov.uk/environment/biodiversity/uk/legislation.htm>.



## 5.2.2 Sites we may not allow

Sites where we may not allow and are unlikely to support converting woodland to open habitat.

- **Ancient woodland.** We will not allow conversion of any ancient woodland sites to open habitat regardless of the age of the current trees and their native or semi-natural status on the site.
- **Native woodland.** We will allow permanent removal of mature native woodland only in exceptional circumstances, where there is evidence that removal is the only option to realise exceptional biodiversity benefits. Our current working definition of “mature native woodland” for this policy is:
  - sites currently composed of native broadleaves that have been wooded for at least 80 years; or
  - sites where a proportion of the current native broadleaved crop is at least 80 years old and where the woodland canopy has been closed (>70% canopy cover) for at least the last 20 years.

The first element picks up sites which have a relatively long history as woodland and are currently under native trees but these trees may be relatively young if felling has recently taken place. The second element picks up sites where some of the current native trees are relatively old but these have been in rather open landscapes for much of their lives with younger trees growing up between them more recently, for example, wood-pasture that has regenerated to woodland. If the canopy closed recently (less than twenty-years ago) such sites may be a priority for conversion back to woodpasture or other open landscapes with trees.

There are other cases where we may not allow the permanent removal of younger native woodland, for example certain wet woodlands, native woodland buffering ancient woodland, or to avoid woodland fragmentation.

- **Protected species and habitats.** There are several species of conservation concern that may be damaged by permanent removal of woodland to restore or expand open habitat. Some of these may be European Protected Species with a legal framework preventing damage. There are also some sites with national or international conservation designations that could be similarly damaged by woodland removal. Where there is evidence that loss of woodland will have a negative impact on a protected species or habitat, we are unlikely to allow conversion of woodland to open habitat. If the organisation proposing the conversion can guarantee appropriate mitigation measures, then we may grant permission, but only if the biodiversity benefits of conversion of the woodland to open habitat are exceptional.
- **Poor condition of current open habitat.** When the organisation proposing the conversion controls open habitat similar to that which it is proposing to create, (i.e. a similar type in a similar location) we will take into account the condition of the current open habitat when deciding whether to allow conversion. If it is in unfavourable condition, we may only grant permission if the conversion is part of a management plan bringing all similar open habitat in the area under the organisation’s control into favourable condition. By unfavourable, we mean that it is not fulfilling its biodiversity potential (for example wet areas are being damaged or there is too much burning so that



species of conservation concern are under threat) and, or, is regenerating to woodland due to poor management or lack of management. Note that this does not include cases where there has been an active and appropriate decision to allow natural regeneration, for example as part of a shifting mixture of open habitat and woodland (see Section 5.4.4).

- **Insignificant impact.** When the new open habitat will be adding a relatively small amount to an already large area of open habitat. In such circumstances, it is unlikely that we will grant permission unless compensatory woodland creation is guaranteed (see Section 5.3.3). An exception could be when the apparently small scale conversion is making an exceptional contribution for reasons other than scale, for example creating an important habitat link.
- **Access.** There can be conflicts between the needs of wildlife and the needs of recreational users of open habitat, for example, ground nesting birds on lowland heathland. In most cases, good site management will minimise the impact of any conflict. However, in some cases it may be necessary to consider alternatives to converting woodland to open habitat to prevent significant conflict between wildlife conservation and people. Where there is heavy recreation pressure on a site, we are unlikely to allow conversion to open habitat unless there is evidence that the access can be managed to minimise potential harm to wildlife without excluding access. Only in exceptional circumstances will it be acceptable to convert a wood to open habitat where there is a significant risk that the needs of wildlife will result in additional pressure to exclude people from a site.
- **Isolated sites.** Where the proposal will create a relatively small area of isolated open habitat with poor connectivity.

By applying this framework for decision-making we will be able to apply the principles of the 'right tree in the right place' and the 'right habitat in the right place'. We must also apply the principle of the 'right kind of change at the right pace'.

### 5.3 Managing the rate of conversion.

The Government supports targets in the England Biodiversity Strategy for expanding and restoring priority open habitat as being aspirational, and shared with the UK Biodiversity Partnership. Conversion of woodland to open habitat can contribute to achieving these targets. The Government also has aspirations for creating more woodland in England as part of moving to a low-carbon economy and to further increase the many benefits from all types of woodland. The UK Low Carbon Transition Plan<sup>14</sup> states that an additional 10,000 ha per year of woodland creation would make a significant contribution to targets for reducing greenhouse gases.

We will make sure that there is a balance between the rate of conversion of woodland to open habitat and the rate of expansion of woodland. This does not mean that any increase in woodland area will automatically lead to an increase in

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[http://www.decc.gov.uk/en/content/cms/publications/lc\\_trans\\_plan/lc\\_trans\\_plan.aspx](http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx).

woodland removal for open habitats. This is because otherwise the increase in woodland would not be additional, just neutral. Equally, we will not expect all removal of woods for open habitats to be directly compensated by woodland creation. This could create an unjustifiable barrier to restoring and expanding open habitats. Instead, we will monitor the rate and type of woodland removal for conversion to open habitat, and compare them to the rate of expansion and the type of woodland being created.

We will monitor woodland removal and creation through the National Forest Inventory. We will monitor progress on restoring and expanding open habitats, through the Biodiversity Action Reporting System. Both report on a five-yearly cycle with more frequent interim reports. Between reporting periods we will monitor progress continually through records of felling licences, environmental impact assessments and higher level stewardship grants.

We will make sure that we make progress on both open habitats and woodland expansion. We will do this by adjusting how we apply the framework for decision making (Section 5.2), when we require compensatory planting (see Section 5.3.3) and by encouraging practitioners to accelerate or delay when they undertake conversion.

If the rate of woodland removal is such that aspirations for woodland expansion are being significantly compromised, we will limit the circumstances in which we support or allow conversion without compensatory planting. Should the rate of woodland removal begin to outstrip the rate of woodland creation, such that there is a risk of the total area of woodland in England going down, we will only allow woodland removal in cases of exceptional biodiversity benefit. Conversely, if we start to exceed aspirations for woodland expansion, we may widen the circumstances in which we support or allow conversion.

We will work out the situation and our approach at each reporting period in an open and transparent way to keep our stakeholders clearly in the picture. We will make sure that the work required to fit into the framework for decision making is kept as uniform as possible so practitioners know what is expected of them.

### 5.3.1 What does this mean in practice?

We estimate that the appropriate level of ambition for land-use change is a rate of conversion of woodland to open habitat of about 1,000 ha per year. This would represent a reasonable balance between woodland removal and woodland creation, once the rate of woodland expansion has accelerated in response to the UK Low Carbon Transition Plan.

The current rate of woodland removal for expansion and restoration of open habitats is about 500 ha per year. In 2008/09 the rate of woodland creation was about 2,100 ha per year. The rate has been falling in recent years and may take several years to accelerate.

1,000 ha per year is not a target. Instead, it represents the most appropriate scale of ambition for change using woodland removal and creation in tandem to generate landscapes that provide benefits for wildlife and people for the 21<sup>st</sup> century, provided the rate of woodland expansion also accelerates. An increase in the rate of conversion of woodland to open habitat will therefore start slowly

and progress towards 1,000 ha per year while the rate of woodland expansion accelerates. We will use the mechanism for managing the rate of conversion to make sure that we make progress in a way that delivers the outcomes we want from the policy.

In practice, conversion projects rarely result in all the woodland on a site being permanently removed. On average, projects over the past five years have resulted in keeping about half the site as closed canopy woodland. On the rest of the site, there is usually a scattering of trees. In addition, in some cases, shifting mixtures of open and wooded habitat may be the most desirable land-use, and in others it may be desirable to relax definitions of 'good condition' (see Section 5.4.4). Converting woodland to open habitat is rarely an 'all or nothing' situation.

When we assess the amount of permanent conversion of woodland to open habitat, we will base it on those areas where what was woodland before the proposal was implemented is now predominately open habitat. Separately there will need to be assessments of its condition, as judged against the objectives set for the site.

### 5.3.2 Balancing the rate of removal and planting of productive woodland

Most of the woodland removed to create more open habitat will be non-native plantations. Non-native plantations (mainly conifer) have a crucial role to play in moving towards a low-carbon economy because they generally grow faster than native woodland and generate higher volumes of potential woodfuel and useable timber. Confidence in the supply of domestically grown timber is important, and productive woodland, including conifers, will play a positive role in the Government's transition plan to a low-carbon economy.

The decision framework outlined in this policy (Section 5.1.4) will favour the conversion to open habitat of land that does not grow high quality timber well. This is because the highest benefits to biodiversity will tend to be on sites of lower fertility. We will also only allow the removal of plantations before economic maturity<sup>15</sup> in exceptional circumstances.

Nevertheless, there is still a need to monitor the conversion of productive woodland to open habitat as a sub-set of our monitoring of total woodland area. We will monitor the balance of removal and creation of productive woodland as part of the Government's drive for woodland expansion. We will use the mechanism for managing conversion of woodland to make sure that the overall area of such woodland in England is not reduced as a consequence of this policy.

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<sup>15</sup> When timber is grown there comes a point in the forestry cycle when it has reached its 'economic maturity'. This is the point where the greatest return on the investment in planting and growing the trees can be achieved through selling the timber. It is the point where the rate at which the trees add marketable timber through growth begins to level off. For conifers this is usually when they are 40 to 50 years old.

For the purposes of this policy we will normally define productive as being at least yield class 10 for conifers and yield class 6 for broadleaves.<sup>16</sup>

### 5.3.3 Compensatory tree planting

We will expect organisations proposing conversion of woodland to open habitat to put in place mechanisms to create new and additional woodland in the following circumstances:

- where a person wishes to convert woodland to open habitat where the biodiversity benefits are not significant, or primarily for non-biodiversity reasons that do not have significant 'spin-off' benefits for biodiversity, where the impact of the expanded habitat on biodiversity is insignificant;
- when the rate of permanent woodland removal is being sustained at a level above the reasonable balance set out in Section 5.3.1, except for sites of exceptional biodiversity benefit;
- when the rate of permanent removal of productive woodland is being sustained at a level above which it is not possible to maintain the total area of productive woodland,<sup>17</sup> except for sites of exceptional biodiversity benefit; or
- when evaluation and review of the policy shows that desired outcomes are not being achieved due to negative impacts through loss of woodland.

Woodland of the right trees in the right place can provide multiple-benefits and there are many reasons for creating new woodland. However, the primary reason for the balancing mechanism in this policy is the need to make sure of progress on both open habitats' and woodlands' contribution to moving to a low-carbon economy. Therefore, the compensatory planting required will be for additional woodland in England that provides equivalent or greater carbon benefits and fulfils the UK Forestry Standard current at the time of permission being granted. Environmental impact assessment of proposed new planting may be required.

Under the UK Low Carbon Transition Plan, the Government's drive for private finance for woodland creation will provide a generally supportive framework for compensatory planting. We will work out the right way of supporting compensatory planting through public funding depending on, for example, the public benefits of the new woodland.

### 5.3.4 Regional and national priorities

Through current mechanisms for developing regional forestry policy, for example Regional Forestry Frameworks regional stakeholders may wish to set a regional approach to managing the rate of converting woodland to open habitat consistent with this national approach. For example, in east England where converting wet

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<sup>16</sup> General yield class is a measure of timber productivity. It is the number of cubic metres (m<sup>3</sup>) of timber by which stands grow per year per hectare.

<sup>17</sup> In such cases we will expect compensatory planting of productive woodland.

woodland to fen can be an issue, an additional regional-scale mechanism for managing the total area of wet woodland may be appropriate.

We will explore ways of developing map-based plans of where woodland conversion should be a priority.

## 5.4 Standards of conversion and management

Below we set out the standards which we expect those converting woodland to open habitat to achieve in both the conversion and subsequent management of that habitat. We also set out the standards which we will support for managing woodland retained on potential open habitat.

### 5.4.1 Standards of conversion

Converting woodland to open habitat has potential impacts on biodiversity, moving to a low-carbon economy and the cost of land management. It could also have positive or negative impacts on other aspects of forestry, such as landscape, soils, historic environment, and water. The evidence shows that if conversion of woodland to open habitats follows guidelines on good practice, the potential negative impact on these aspects of forestry will be minimised.

**We will not allow conversion of woodland to open habitat that does not follow these guidelines.**

The key guidelines are associated with the UK Forestry Standard:<sup>18</sup>

- *Forests and Landscape*
- *Forest and Soils*
- *Forests and Historic Environment*
- *Forests and Water*
- *Forests and Biodiversity*
- *Forests and Climate Change*

Other relevant practice guides may be available from us and other organisations. We will develop a more comprehensive list as part of implementing this policy and decide whether any additional information is needed.

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<sup>18</sup> This is currently being revised, see <http://www.forestry.gov.uk/ukfs>. The new version is expected to be published in Autumn 2010. This section refers to the draft revised versions. In the meantime, the 2004 version applies, see <http://www.forestry.gov.uk/website/publications.nsf/WebpubsbyISBN/0855386266>.

## 5.4.2 Minimising carbon emissions

Converting woodland to open habitat should use methods that minimise greenhouse gas emissions during the conversion. These include:

- not felling before economic maturity, except in exceptional circumstances;
- using the timber and other harvested wood products in activities such as construction and woodfuel heating;
- not removing stumps;
- avoiding brash burning;
- avoiding removal of the top soil; and
- not disturbing deep peat.

All projects will have to comply with good practice for minimising emissions. The *UK Forestry Standard Forests and Climate Change Guidelines* will provide further information.

As well as emissions during the conversion, we need to take into account the reduction in timber production from the site. This is because timber and other harvested wood products can be used to substitute for products such as concrete, steel and fossil fuels which result in high greenhouse gas emissions.

To minimise the negative impact on carbon emissions through loss of substitution potential, we will allow felling before economic maturity only where the biodiversity benefits are exceptional, for example where there is evidence of possible imminent local extinction of a priority species which can only be rectified by woodland removal. Specifically, a short-term funding opportunity, or the need to achieve time-bound targets for open habitat restoration, or expansion, will not justify premature felling.

We will normally require applicants to consider the impacts on carbon emissions of conversion to open habitat as part of environmental impact assessment. We will refine and regularly update the calculation of carbon impacts of restoring and expanding open habitats from woods and forests in England. When calculating the carbon impact of woodland removal, both the impact on the long-term carbon store of the site, and the reduced rate of production of timber and woodfuel that substitute for other energy intensive materials and fuels, should be taken into account. Similarly, practitioners should also take the impact on carbon storage *and* substitution for more energy intensive materials and fuels into account when calculating the carbon impact of compensatory woodland creation (see Section 5.3.3).

## 5.4.3 Wildfire

Evidence indicates that open habitats generally present greater wildfire risk than woodland. This is a particular issue for lowland heathland. We will routinely look at the impact of wildfire risk in the scoping exercise for all proposals for converting woodland to open habitat that are over thresholds for environmental impact assessment. Where we require an environmental statement, and wildfire risk is identified as an issue, the practitioner should liaise with the local fire authority to agree appropriate mitigation and control measures.



Relevant guidance on wildfire includes:

- Integrated Risk Management Planning Steering Group (2008) *Integrated Risk Management Planning: Policy Guidance – Wildfire*.<sup>19</sup>

#### 5.4.4 Standards of managing open habitat restored or expanded from woodland

Maintaining land as permanent open habitat<sup>20</sup> within reasonable costs requires stable management processes that control the regeneration of trees, rather than relying on periodic remedial work.

Some sites are easier than others to restore to stable open habitat. The key factors are:

- soil fertility – less fertile sites tend to be easier to establish and maintain as open habitat;
- changes to drainage patterns – particularly for wetland sites such as fens and blanket bog, the ease of restoring more natural drainage patterns is a key consideration; and
- type of woodland cover – grassland and lowland heathland sites under native trees are usually harder to convert than sites under conifers, particularly pine.

The framework for deciding on which sites to support or allow for conversion will tend to promote those sites where restoration is likely to be successful. For more difficult sites in particular, we may not allow and are unlikely to support the removal of woodland unless there is evidence that there is an adequately resourced management plan to achieve the objectives of the project.

Ideally, long-term management that generates beneficial ecology, for example periodic opening of gaps in the vegetation cover to allow new plants to colonise, will be linked to economic activity, such as grazing, biomass production, shooting, or growing timber.

Outside designated sites, such as Sites of Special Scientific Interest, it is not necessary to manage a newly converted open habitat to strict vegetation standards. In addition, a more dynamic approach to vegetation management, accepting a shifting pattern of permanent woodland, permanent open space, and temporary woodland or open space could be desirable.

We will explore with Natural England and on the public forest estate how to plan and manage shifting patterns of open habitat and woodland and tell stakeholders. Initial evidence is that a rough 'thirds' principle appears beneficial, with a third permanent open habitat, a third permanent woodland, and a third temporary woodland or open habitat on a 10 to 15 year rotation of vegetation management. Habitat size will be important with evidence that for lowland heathland, such a system could only work in an area of at least 90 ha.

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<sup>19</sup> <http://www.communities.gov.uk/publications/fire/irmpwildfire>.

<sup>20</sup> See below for discussion of where shifting mixtures of woodland and open habitat might be desirable.

### 5.4.5 Standards of management of woodland retained on potential open habitat

Where woodland or forest growing on potential open habitat is retained, it should be managed so it can be converted to open habitat in future if this becomes desirable. We will support such management (see Section 5.1.4). Suitable management includes:

- maintaining the current plantation or woodland with potential for conversion;
- removing tree cover from the wettest (and least productive) areas such as mires, bogs and fen margins (except where the woodland is biodiverse wet woodland);
- creating a network of permanent open space in the form of wide rides, glades, and loading areas;
- maintaining a mosaic of temporary open felled areas through clearfelling and re-planting; and
- setting up open canopy conditions through regular thinning, extended rotations and selective felling.

Appropriate management of the area between open habitat and woodland, the 'ecotone' can have significant benefits for wildlife and land managers should consider this.

In general, woodland and open habitats can be mutually beneficial. For example, woodland can help with managing access because it tends to be able to absorb greater recreational pressure.

## 5.5 Local involvement

We expect a great deal of local involvement in developing any proposal to permanently convert woodland or forest to open habitat.

We expect anyone making a proposal to present us with stakeholder analysis showing that they have considered whether local involvement in developing their proposal is appropriate. Only in exceptional circumstances, for example where the site is isolated and little used, will no active local involvement be acceptable.

Where necessary, we will require the person making the proposal to supply us with evidence for their proposal that:

- local people have taken part in developing it;
- it broadly reflects the general wishes of local stakeholders; and
- there is broad local acceptance of it.

For an environmental impact assessment, the stakeholder analysis can form part of the scoping exercise and the evidence of local involvement, part of the environmental statement.



With previous projects, such local participation has meant that proposals have happened more slowly and involved more woodland retention than would have happened otherwise. This may or may not be the case with new projects coming forward.

Where we do not get the evidence, we may not allow proposals to convert woodland to open habitat unless the potential biodiversity benefits are nationally significant, for example on a site with an international designation for its open habitat characteristics.

We may support local involvement in developing proposals through the English Woodland Grant Scheme.

## 5.6 Monitoring and evaluation

We will measure success according to delivery of the outcomes we want set out in Section 4.4, and as shown by a set of indicators for each outcome. A proposed list of indicators is in Table 1. While progress against targets for restoration and expansion of open habitats will be one of the indicators, we will not set targets based on hectares of woodland converted to open habitat. Instead, we will base our evaluation on achievement of the desired outcomes, with progress against the indicators as evidence. We will also use other forms of evaluation, such as the opinions of key stakeholders.

We will conduct our evaluation in an open and transparent way involving stakeholders and publishing the results and our reasoning. To do this we will use current structures such as the England Woodland Biodiversity Group, the Lowland and Upland Farmland Biodiversity Integration Group, and the England Forest Industries Partnership.

We will set up a framework for monitoring and evaluating the outcomes of individual open habitat projects. We will encourage all projects converting woodland to open habitat to fit into this framework by providing baseline measurements of the key indicators for their site and reporting changes after intervention. These will be required as part of environmental statements for environmental impact assessment and as a condition of grant aid for management. We will also include in this framework some sites where woodland on potential open habitat is retained so we can properly assess the impact of both removing and retaining woodland.

For significant projects, we may provide support for baseline measurements and post-intervention measurements in retained woodland as part of woodland assessment grants through English Woodland Grant Scheme. Natural England may provide support for post-intervention measurement in newly expanded or restored open habitat.

We will monitor and evaluate open habitat projects on the public forest estate.

We will reassess the evidence for the impact of conversion of woodland to open habitat, and use it in our review of policy and to further develop the framework for deciding on which sites we should support or allow for conversion. Our first full review of this policy will be in 2015, although we will undertake an initial

'light touch' review in 2012 as part of refreshing the current Delivery Plan for the Government's Strategy for England's Trees, Woods and Forests.

**Table 1: Proposed indicators of outcomes.**

| <b>Outcome</b>   | <b>Indicators</b>   |
|--|---|
| <b>Resilient, biodiverse ecological communities</b>    | Number and area of projects restoring and expanding open habitats from woods and forests in England.  |
|  | Trends in populations of UK Biodiversity Action Plan species associated with open habitats.   |
|  | Trends in open habitats that can be restored or expanded from woods and forests.  |
|  | Patch size: mean patch size of restored open habitats and number of open habitats restored from woods and forests above a threshold patch size.   |
|  | We will explore an indicator combining patch size and connectivity.   |
| <b>Moving to a low-carbon economy</b>                  | The carbon sink strength of post 1990 afforestation, deforestation and reforestation in England relative to 'business as usual' projections. <sup>21</sup>  |
|  | Changes in area of productive conifer plantation in England.  |
|  | Area of woodland permanently removed for open habitat restoration or expansion versus area of woodland created compared to aspirations for woodland expansion.  |
| <b>Financial viability</b>                             | Condition of open habitats recently restored or expanded from woodland.   |
|  | Trends in total public funding allocated to maintaining open habitats.  |
|  | Proportion of open habitats recently restored or expanded from woodland that have long-term, adequately resourced management plans, including those which use economic activity to maintain the open habitat. |
| <b>Positive engagement with local and other users.</b> | Proportion of proposals that require formal conflict resolution, such as referral to Regional Advisory Committees.  |
|  | Publicity surrounding proposals for conversion of woodland to open habitat.   |

<sup>21</sup> As reported by Centre for Ecology and Hydrology in 2009.

## 6 Next steps

### 6.1 Publicising this policy

We will tell people about this policy through a series of events, the website at [www.forestry.gov.uk/england-openhabitats](http://www.forestry.gov.uk/england-openhabitats), via staff to our stakeholders, press releases, briefing notes, and by attending appropriate forums, for example:

- the England Woodland Biodiversity Group;
- the Farmland Biodiversity Integration Group; and
- the England Forest Industries Partnership.

We will also develop a number of significant projects early on to show our progress and how the policy works in practice.

### 6.2 Evolving delivery mechanisms

We will evolve our delivery mechanisms to implement this policy during 2010/11 and establish the baseline for the evaluation framework.

We will publish a strategy for open habitats on the Forestry Commission public forest estate during 2010/11. This will follow the conclusions of the study of the long-term role of the public forest estate and the public forest estate elements of the Government's Operational Efficiency Programme.<sup>22</sup>

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<sup>22</sup> [www.forestry.gov.uk/england-estatestudy](http://www.forestry.gov.uk/england-estatestudy) .

## 7 Conclusion

Our policy responds to the opportunities and challenges of:

- biodiversity conservation;
- climate change;
- economic uncertainty; and
- local accountability.

It takes a balanced approach accounting for all the Government's objectives for forestry in England, including restoring and expanding open habitats from woodland. It aims to achieve the desired outcomes through a pragmatic approach that does not increase the regulatory burden.

Developing the policy has involved many stakeholders, not just through consultation, but via active participation in workshops, evidence gathering, and testing ideas. This has sometimes been difficult for everyone. Foresters have had to get involved in a policy that involves an element of deforestation. Those focused on biodiversity conservation have had to take account of other elements of land-use. Generalists have had to get involved in a complex technical arena. People with a local interest have had to get involved in a national-scale process. The engagement has been highly constructive.

The focus is on how to generate a landscape that provides multiple benefits for the 21<sup>st</sup> century. In it we set out a dynamic future for woodland and open habitat that takes account of the evidence. Some woodland will be removed to restore or expand open habitat where biodiversity benefits are greatest, particularly where it builds on what we already have. Other woodland will be kept but managed to maintain the ability to convert to open habitat at a later stage if there is a need. Others will be transformed into large-scale shifting mixes of habitat types.

We will continue to work closely with Natural England and others to implement the policy, including monitoring, evaluating and reviewing it, in an open and transparent way seeking the active involvement of stakeholders.

## 8 Annexes

### 8.1 Annex 1: Process for developing open habitats policy.

See [www.forestry.gov.uk/england-openhabitats](http://www.forestry.gov.uk/england-openhabitats) for further details.

| No. | Step  | Mechanism  | Timescale   |
|-----|---|--|---|
| 1.  | <b>Fit progress to date into a policy cycle</b>                           | Forestry Commission (FC) used work to date and published a process document. | June 2008.  |
| 2.  | <b>Work out implications for delivery mechanisms and collate evidence</b> | FC analysed evidence and set out summary.                                    | August – September 2008.<br>Summary published November 2008 with additional papers in April and May 2009. |
| 3.  | <b>Plan evaluation</b>  | Including stakeholder workshop.  | Sept – Oct 2008   |
| 4.  | <b>Appraise options</b>   |  | Workshop 26 Sept: reviewed evidence, ranked outcomes, and developed criteria.                             |
| 5.  | <b>Consult</b>  | Formal public consultation.  | Launched March 2009, finished June 2009.<br>Summary of responses published in July 2009.                  |
| 6.  | <b>Make a decision</b>  | Policy proposals submitted to Ministers by FC.                               | January – March 2010.   |
| 7.  | <b>Publish policy document</b>  | FC drafted.  | March 2010.   |
| 8.  | <b>Communicate policy</b>   | Events.  | Planned for Summer 2010.  |
| 9.  | <b>Set up delivery mechanisms</b>   | To include a strategy for the FC public forest estate.                       | During 2010 / 11  |

## 8.2 Annex 2: Policy context

Action to conserve biodiversity is a key element of the Government's Public Service Agreement 28 on securing a healthy natural environment. 2010 is the International Year of Biodiversity, with the tenth Conference of the Parties to the Convention on Biological Diversity taking place in October. This will review achievement of the global target to substantially reduce biodiversity loss by 2010. This year, the European Commission will also be reporting on progress towards its 2010 target of halting biodiversity loss across Member States.

In July 2009, the Government published the UK Low-carbon Transition Plan (LCTP), which included a drive for a major expansion in woodland cover to help meet objectives to mitigate climate change. In November 2009, The Read Report<sup>23</sup> highlighted the carbon benefits of woodland expansion, and noted that the capacity of UK woodland to sequester carbon is declining, and will decline further without more woodland creation.

### **The Government's Strategy for England's Trees Woods and Forests (ETWF)**

In ETWF, the direct reference to this policy process is in the Land and Natural Environment theme policies: "*..[we will] develop a clear rationale to guide removal of inappropriate plantations and woodland where other key [Biodiversity Action Plan] habitats (e.g. lowland heathland and bog) can be restored and where the benefits of doing so outweigh the environmental and social costs*".

The Delivery Plan for ETWF reflects this with an action in the Natural Environment aim: "*Develop a clear rationale to guide the removal of inappropriate plantations, woodland and trees for the purposes of restoring key habitats.*"

We have developed this policy taking into account all the aims of ETWF:

- a sustainable resource;
- climate change;
- natural environment;
- quality of life; and
- business and markets.

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<sup>23</sup> The Read Report "*Combating Climate Change: A Role for UK Forests*", <http://www.forestry.gov.uk/forestry/infd-7y4gn9>.

## England Biodiversity Strategy (EBS).

In the EBS, there are two direct references to this policy process, both in the “Woodlands and forestry work programme 2006 – 2010”.

1. *“Anticipated outcome 2010: 5. A significant contribution to the restoration and re-creation targets for open ground priority habitats through removal of trees from appropriate sites.”*
2. *“Key deliverables to achieve anticipated outcome: Development and implementation of a policy on ‘Restoration of Open Habitats from Forestry’, through joined up delivery measures, and a restoration strategy for the public forest estate.”*

The ‘restoration and re-creation’ targets<sup>24</sup> referred to are grouped together in open habitat Habitat Action Plans (HAPs), part of the UK Biodiversity Action Plan (BAP). The total area of HAP targets directly relevant to open habitats policy is 45,238ha (Table 5).

The EBS and UKBAP are aligned with binding commitments by the Government to halt and then reverse the decline in biodiversity by 2010.<sup>25</sup> Ministers support the habitat and species targets as aspirational targets shared with a multi-sectoral UK Biodiversity Partnership with the Government playing its part.

**Progress against targets:** Of the 15 restoration or expansion targets in 2008 (last reporting round) eight were on schedule, six were making some progress but behind schedule, and one had made no progress. 68% of targets in relevant Species Action Plans are on or ahead of target. In some circumstances, the desired biodiversity outcomes can be achieved without permanent woodland removal, for example populations of woodlark and nightjar, often considered heathland birds, are increasing due, in large part, to the management of conifer plantations to meet the UK Forestry Standard for sustainable forest management.<sup>26</sup>

## UK Low-carbon Transition Plan (LCTP)

In the LCTP, there is a section on the contribution of protecting, managing and growing forests. This sets out how woodland creation is a very cost effective way of fighting climate change, how the current contribution of woodland is set to decrease, and that Government will encourage the creation of new woodland to lock away carbon and provide other benefits. The LCTP is aligned with binding commitments on reducing greenhouse gas emissions but as for habitats, the woodland creation ‘targets’ are aspirational. The key statement of relevance to

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<sup>24</sup> In this document we refer to these as ‘restoration and expansion’ targets to align with the UK BAP.

<sup>25</sup> See European Council Gothenburg declaration 2001 [http://www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressData/en/ec/0020](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/0020) and Convention on Biological Diversity biodiversity target 2010 <http://www.cbd.int/2010-target/>.

<sup>26</sup> The State of the UK’s Birds 2008, [http://www.bto.org/research/pop\\_trends/state\\_uk\\_birds.htm](http://www.bto.org/research/pop_trends/state_uk_birds.htm).

open habitats policy is: *“The Government will support a new drive to encourage private funding for woodland creation. If we could create an additional 10,000 hectares of woodland per year for 15 years, those growing trees could remove up to 50 million tonnes of carbon dioxide between now and 2050”.*

**Progress:** The LCTP was published in October 2009 so the new drive for woodland creation has not yet taken effect. In 2008/09 the rate of woodland creation was 2,100 ha per year. The rate of woodland creation has fallen by 20% year-on-year since 2004/05. Because the woodland planted in the 20<sup>th</sup> century is maturing, the carbon reducing potential of forestry in England is falling. In order to deliver carbon reduction of 50 MtCO<sub>2</sub>e per year through sequestration in forest biomass by 2050, the rate of woodland creation would have to increase to 12,200 ha per year within the next few years.



## 8.3 Annex 3: Impact of converting woodland to open habitat: summary of evidence.

We identified a range of factors to take into account when developing this policy arising from all the Government's objectives for England's woods and forests. We collated the evidence about the potential impact of restoring and expanding open habitats from woods and forests on these factors. Following analysis at a stakeholder workshop on 26 September 2008<sup>27</sup> we published Forestry Commission (2008) *Restoration of open habitats from woods and forests in England: developing Government policy: evidence*<sup>28</sup> (the 'evidence paper'). Since we published the evidence paper, additional evidence has become available as follows:

- updated economic analysis as set out in more detail in the policy impact analysis;
- we ran a public consultation on policy proposals in March to June 2009, we published a report on the responses in July 2009, summarised at Section 8.3.1;
- a survey of open habitat and open habitat potential on the public forest estate; and
- a report by the England Forest Industries Partnership commissioned by us on the potential impact on the timber industry.

**Table 2** has a summary of the current key areas of evidence and all documents can be found at [www.forestry.gov.uk/england-openhabitats](http://www.forestry.gov.uk/england-openhabitats).

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<sup>27</sup> See <http://www.forestry.gov.uk/website/oldsite.nsf/byunique/INFD-7K9CPA> for a report.

<sup>28</sup> [www.forestry.gov.uk/england-openhabitats](http://www.forestry.gov.uk/england-openhabitats)

**Table 2 The impact of converting woodland to open habitats: evidence**

| Factor                                | Impact  |
|---------------------------------------|---|
| <b>Cost to public finances</b>        | <p>Costs vary, but on average, open habitats cost about £120 per ha per year more to manage than woodland. Maintaining open habitats generally costs more to public finances than maintaining woodland or forests. This is an issue because of uncertainty over long-term public funding, and evidence that recently restored open habitat is in poor condition. There are 707,000 ha of open habitat already, about 50% of this is in target condition.</p>  |
| <b>Moving to a low-carbon economy</b> | <p>Converting woodland to open habitat reduces the contribution of that site to moving to a low-carbon economy because it:</p> <ul style="list-style-type: none"> <li>• reduces the long-term average carbon store; and</li> <li>• reduces timber production and the potential to substitute timber for other higher carbon materials and fuels.</li> </ul> <p>Government aspirations for woodland creation could be compromised by too fast a rate of conversion of woods and forests to open habitat.</p> <p>There are about 130,000 ha of woodland on potential open habitat in England (Table 3). Cross-referencing this to targets for expansion and restoration of open habitats (Table 4) shows that if the contribution of woodland removal to open habitats targets were maximised, the rate of removal would be about 3,000 ha per year (Table 5). The UK Low-carbon Transition Plan sets out how an additional 10,000 ha per year of woodland creation could make a significant contribution to reducing greenhouse gases. In 2008/09 the rate of woodland expansion was about 2,100 ha per year. The annual rate has fallen by 20% year-on-year since 2004/05.</p>                                      |
| <b>Biodiversity</b>                   | <p>Restoring and expanding open habitats from woods and forests will benefit key species in many cases, but many of the desirable outcomes for biodiversity can be delivered via sensitive management of woods and forests on potential open habitat. Permanent woodland removal is not always required. 68% of the targets in relevant Species Actions Plans are on or ahead of target.</p> <p>The evidence is uncertain and we need to monitor the impacts on biodiversity.</p> <p>It is possible to manage retained woods and forests to make sure they still have the potential to convert to open habitat later.</p> <p>Dynamic mosaics of open habitat and woodland appear to offer benefits. For rare plants, grazing appears to be important.</p> <p>Connectivity and patch size are important.</p> <p>The most biodiverse open habitats are likely to be created on the least fertile soils.</p> <p>Negative impact on woodland biodiversity can be avoided by not losing mature native woodland or ancient woodland and allowing flexibility to decide the approach at sites where there is special woodland biodiversity, for example when considering conversion of wet woodland to fen or reedbed.</p> |
| <b>Timber industry</b>                | <p>There is little evidence of direct negative impact, but a lack of confidence</p>   |

## When to convert woods and forests to open habitat in England: Government policy

| <b>Factor</b>  | <b>Impact</b>   |
|--|---|
|  | due to perceived policy messages may have an impact on investment and recruitment.  |
| <b>Local engagement</b>  | If local people are not involved during decision-making about proposals for restoring and expanding open habitat from woods and forests, it is very likely this will reduce the positive contribution to quality of life of that land and for there to be local conflict during projects. |
| <b>Landscape value</b>   | There will be little impact on landscape value as long as guidance on good practice is followed.  |
| <b>Access</b>  | In most cases, there will be little impact on access. However, in some cases there could be an increase in conflict between the needs of recreational users and ground nesting birds.   |
| <b>Other factors such as soil, water, air quality, historic environment, tourism, rural development.</b> | Little impact as long as guidance on good practice is followed and local issues considered.   |

**Table 3 Woodland on potential open habitat in England**

| Habitat Action Plan                       | Potential habitat under plantation. |   | Potential habitat under native woodland |   | Spatial distribution within England   |
|---|-------------------------------------|---|---|---|---|
|   | Area (ha)                           | Typically managed for timber.                 | Area (ha)                               | Typically natural regeneration, little management, general yield class (GYC) 4. <sup>29</sup> |   |
|   |                                     |   |   |   | Northern – north of Humber & Mersey.<br>Central – East and West Midlands.<br>Southern – rest. |
| <b>Lowland meadows</b>                    | 0                                   | n/a   | 0                                       |   | n/a   |
| <b>Upland hay meadows</b>                 | 0                                   | n/a   | 0                                       |   | n/a   |
| <b>Lowland calcareous grassland</b>       | 0                                   | n/a   | c.20,000                                | Scrub.  | Mainly southern or central. <sup>30</sup>   |
| <b>Lowland dry acid grassland</b>         | c.300                               | Scots pine GYC 8.                             | c.3,000                                 | Mixed regeneration mainly birch with some Scots pine.   | Mainly southern or central.   |
| <b>Purple moor grass and rush pasture</b> | c. 300                              | Douglas fir and Sitka spruce, GYC 18.         | c. 200                                  | Scrub or secondary native woodland.   | Plantation mainly south west, native woodland in all parts.                                   |
| <b>Upland heathland (moor)</b>            | c.20,000                            | Sitka spruce GYC 10.                          | 0                                       | n/a   | Mainly northern.  |
| <b>Lowland raised bogs</b>                | c.500                               | Sitka or Norway spruce, Lodgepole pine GYC 8. | 0                                       | n/a   | Mainly northern.  |
| <b>Blanket bog</b>                        | c.5,000                             | Sitka or Norway spruce, Lodgepole pine GYC 8. | 0                                       | n/a   | Mainly northern.  |

<sup>29</sup> General Yield Class (GYC) is a measure of timber productivity. It is the number of cubic metres (m<sup>3</sup>) of timber by which a stand grows per ha per year. Some conifers can reach yield class 22, many hardwoods can achieve just yield class 4 or 6.

<sup>30</sup> We estimate that 66% of the grassland resource is in southern England.

| Habitat Action Plan      | Potential habitat under plantation. |                                      | Potential habitat under native woodland |   | Spatial distribution within England                           |
|--------------------------|-------------------------------------|--------------------------------------|---|---|---|
|                          | Area (ha)                           | Typically managed for timber.        | Area (ha)                               | Typically natural regeneration, little management, general yield class (GYC) 4. <sup>29</sup> |   |
| <b>Fens</b>              | c 600                               | Scots pine GYC 6 and poplar, GYC 14. | 1,000                                   | Wet woodland.   | Wet woodland in east England, plantation in northern England. |
| <b>Reedbed</b>           | 0                                   | n/a                                  | 1,000                                   | Wet woodland.   | East.   |
| <b>Lowland heathland</b> | c.60,000                            | Scots pine GYC 12. <sup>31</sup> .   | c.20,000                                | Mixed regeneration mainly birch with some Scots pine.   | Mainly southern or central. <sup>32</sup>                     |
| <b>TOTAL</b>             | <b>86,700</b>                       |                                      | <b>43,200</b>                           |   |   |

<sup>31</sup> Much is Corsican pine at yield class 14 but guidelines for responding to the disease, red band needle blight make it more realistic to assume Scots pine at yield class 12.

<sup>32</sup> We estimate that 75% of the lowland heathland resource is in southern England.

**Table 4 Habitat Action Plan targets for England relevant to policy on when to convert woodland in England to open habitat**

| <b>Open habitat.</b>                      | <b>Maintenance</b><br>– total area of habitat to maintained (ha). | <b>Achieve condition by 2015</b> , – habitat in unfavourable condition to be brought into favourable condition (as defined) (ha). | <b>Restoration by 2015</b> – where it has been partly lost, recovering the vegetation for that habitat (as defined) (ha). | <b>Expansion by 2015</b><br>– habitat to be created from established land-uses other than that habitat (ha). |
|---|---|---|---|--|
| <b>Lowland meadows</b>                    | 7,282   | 6,078   | 481   | 256 from improved grassland or arable.   |
| <b>Upland hay meadows</b>                 | 870   | 830   | 48  | 72 (as above).   |
| <b>Lowland calcareous grassland</b>       | 38,687  | 32,036  | 726   | 8,426 (as above).  |
| <b>Lowland dry acid grassland</b>         | 20,142  | 17, 295   | 285   | 276 (as above).  |
| <b>Purple moor grass and rush pasture</b> | 21,554  | 19,195  | 128   | 151 (as above).  |
| <b>Upland heathland (moor)</b>            | 220,000   | To be confirmed.  | No target.  | No target.   |
| <b>Lowland raised bogs</b>                | 11,200  | 7,466   | 1,000   | No target.   |
| <b>Blanket bog</b>                        | 240,000   | To be confirmed.  | No target.  | No target.   |
| <b>Fens</b>                               | 11,200  | 7,466   | 1,500 <sup>33</sup>   | No target.   |
| <b>Reedbed</b>                            | 5,200   | 4,680   | No target.  | 1,900 <sup>34</sup>  |
| <b>Lowland heathland</b>                  | 58,000  | 33,070 <sup>35</sup>  |   | 6,100 <sup>36</sup>  |

<sup>33</sup> Target is to initiate the restoration.

<sup>34</sup> Targets land of low nature conservation interest. Some of this may be wet woodland.

<sup>35</sup> For lowland heathland, the HAP targets combine ‘achieving condition’ and ‘restoration’ under the ‘achieve condition’ target because there is little distinction between operations for condition and restoration. Many of these operations will involve clearing regenerating woodland. This figure does not include the element of the BAP target from expansion in the previous five years to avoid double counting.

<sup>36</sup> Reported as 7,600 in *Working with the grain of nature* but 6,100 is the correct figure for England alone.

**Table 5 Maximum potential contribution of woodland removal to published targets for restoring or expanding open habitats**

| Habitat                            | Maximum potential contribution to 2015 HAP targets by removal of woodland (ha). |                     |                  |  |
|------------------------------------|---|---------------------|------------------|--|
|                                    | Restoration target  |                     | Expansion target |  |
|                                    | Plantation  | Native wood         | Plantation       | Native wood  |
| Lowland meadows                    | 0   | 0                   | 0                | 0  |
| Upland hay meadows                 | 0   | 0                   | 0                | 0  |
| Lowland calcareous grassland       | 0   | 726                 | 0                | 0  |
| Lowland dry acid grassland         | 0   | 285                 | 0                | 0  |
| Purple moor grass and rush pasture | 0   | 128                 | 0                | 0  |
| Upland heathland (moor)            | 0   | 0                   | 0                | 0  |
| Lowland raised bogs                | 500   | 0                   | 0                | 0  |
| Blanket bog                        | HAP target not set.   | HAP target not set. | 0                | 0  |
| Fens                               | 600   | 1,000               | 0                | 0  |
| Reedbed                            | 0   | 0                   | 0                | 1,000  |
| Lowland heathland                  | 0   | 20,000              | 6,100            | 0 (assuming no mature native woodland is removed). |
| <b>TOTAL</b>                       | <b>30,239</b>   |                     |                  |  |

### 8.3.1 Summary of responses to the consultation.

The consultation was run between March to June 2009. Further details are at [www.forestry.gov.uk/england-openhabitats-consultation](http://www.forestry.gov.uk/england-openhabitats-consultation).

We received 223 responses including those from Natural England, non-governmental organisations (NGO), timber industry bodies and businesses, local and regional forums on biodiversity and land-use, community groups, FC Regional Advisory Committees and individuals. In addition 318 young people took part in producing a response.

There was no clear general consensus. The more reasoned responses can be allocated to three schools of thought:

- A. Woodland removal is a last resort because of the impact on carbon emissions, the timber industry, and costs. Removal must be compensated by like-for-like planting, including of conifers.
- B. A policy focussed on a defined land-use for a particular reason (be it woodland for timber or open habitat for biodiversity) is unhelpful because it is possible to provide multiple benefits through dynamic and flexible land management at a landscape scale.
- C. Woodland removal to restore open habitats is supported because it helps with climate change adaptation and achieving Biodiversity Action Plan targets. There should be ambitious targets, but they can be achieved over a long timescale; sites where beneficial impact on wildlife is greatest should be priorities. Negative impacts on woodland biodiversity, amenity and carbon are relatively low and can be mitigated by (native) planting across the country.

There was general support for local involvement in decision-making in the early stages of woodland removal.

The consultation included a question on scenarios for 370 ha, 500 ha, 1,100 ha or 3,000 ha per year of open habitat from woods and forests. There was little consensus on the appropriate level.

See <http://www.forestry.gov.uk/website/forestry.nsf/byunique/INFID-7LZKKA> for a summary of responses.



## 8.4 Annex 4: Guideline minimum sizes for viable patches of open habitat.

| <b>Open habitat.</b>                      | <b>Threshold patch size target in Habitat Action Plans(ha)</b> |
|---|--|
| <b>Lowland meadows</b>                    | 2  |
| <b>Upland hay meadows</b>                 | 2  |
| <b>Lowland calcareous grassland</b>       | 2  |
| <b>Lowland dry acid grassland</b>         | 6  |
| <b>Purple moor grass and rush pasture</b> | 2  |
| <b>Upland heathland (moor)</b>            | Target not set   |
| <b>Lowland raised bogs</b>                | Target not set.  |
| <b>Blanket bog</b>                        | Target not set   |
| <b>Fens</b>                               | Target for 2 new landscape scale wetland complexes in England. |
| <b>Reedbeds</b>                           |  |
| <b>Lowland heathland</b>                  | 30   |